

DELPHACIDAE FROM THE LESSER ANTILLES (HOMOPTERA : FULGOROIDEA)

By R. G. FENNAH

THIS report is concerned primarily with the Delphacidae of the Lesser Antillean archipelago in the West Indies, though opportunity is also taken to comment on a few species of interest in adjacent territories.

Only five species in this family have so far been reported from this area. In 1833 Westwood described *Delphax saccharivora* from Grenada and Barbados, and in 1907 Kirkaldy recorded the occurrence of *Peregrinus maidis* (Ashm.) in Barbados. Muir (1918) described *Delphacodes nigrifacies* and *D. mardininae* (= *D. havanensis* (Cwfd.)) from Martinique and *D. erectus nigripennis* (nec Cwfd.) (= *D. humilis* V. D.) from Guadeloupe. Twenty additional species are listed below, and five of them are described as new: two new species are also described from Trinidad, T.W.I.

In the Lesser Antilles the Delphacidae include a higher proportion of widespread species than do other families of Fulgoroidea, and accordingly it is possible to surmise the source and distribution of most species from the reports of Crawford (1914), Van Duzee (1907), Muir & Giffard (1924, 1926), Fennah (1945) and Caldwell & Martorell (1950), the last including the records of Osborn (1935).

The survey by Caldwell & Martorell of the Puerto Rican Delphacidae is useful in indicating possible gaps in the Lesser Antillean collection. The latter, which consists almost entirely of material taken by the writer, was built up from samples collected in a small number of localities which, even in sum, do not satisfactorily represent the full ecological range of Delphacid habitats in each island. Only in St. Lucia was sampling satisfactory in this respect, but even there it was inadequate with reference to possible seasonal change of population. Nevertheless, as shown in the tabular synopsis of distribution of species, the more extensive collecting in this island resulted in a more comprehensive list.

The fulgoroid faunas of the principal islands of the Lesser Antillean archipelago tend to be similar, though modified by impoverishment in South American elements northward and a more gradual impoverishment in Central American and Greater Antillean elements southward. Thus, within limits, it is reasonable to infer the presence of certain genera in islands where they have not yet been reported.

The columns in the distributional synopsis of Delphacidae are arranged from left to right in the same order as the islands (except Antigua) occur from south to north, so that it can readily be seen which omissions are most probably attributable to incomplete collecting: among the most obvious are those of *Peregrinus maidis* (Ashm.) from the Montserrat list, *Delphacodes teapae* Fowl. from the Grenada list,

and of *Saccharosydne saccharivora* (Westw.) and of *Punana* from the St. Vincent and Nevis lists respectively.

The species of *Eucanyra* (or *Ugyops*), *Punana* and *Burnilia* known to the writer are found in forest associations, and do not normally feed on grasses. Whereas *Punana* was taken in fair numbers, and *Burnilia* sparsely, and others of each were seen but not captured, no example of *Ugyops* has been found in the Lesser Antilles. Two species occur in Puerto Rico, and one in Trinidad, this being clearly related to one of the Puerto Rican species. In this particular genus it is not warrantable to assume that *Ugyops* is present in the intervening islands, as exploration of its potential habitat has been fairly thorough.

DISTRIBUTIONAL LIST OF LESSER ANTILLEAN FULGOROIDEA

	Trinidad	Grenada	St. Vincent	St. Lucia	Dominica	Montserrat	Nevis	St. Kitts	Antigua	Jamaica	Other areas
<i>Ugyops flagellata</i> Fenn.	. x	. .	. .	. .	. .	. .	. .	. .	. .	. .
<i>Punana dolon</i> * x	. .	. x	. .	. .
<i>P. dominicana</i> * x	. .	. .	. .	. .	. .
<i>Burnilia spinifera</i> Fenn.	. x	. .	. x	. .	. x	. .	. .	. .	. .	. .
<i>Stobaera</i> sp. x	. .	. .	. .	. .	. .	. .
<i>Saccharosydne saccharivora</i> Westw.	. .	. x	. x	. .	. x	. .	. .	. .	. .	. x	Barbados.
<i>S. ornatipennis</i> Muir x	. .	. .	. .	. .	. .	. .	Brazil.
<i>Neomalaxa flava</i> Muir	. .	. x	. .	. .	. x	. .	. .	. .	. .	. .	Puerto Rico, Brazil.
<i>Peregrinus maidis</i> (Ashm.)	. x	. x	. x	. x	. x	. .	. x	. x	. x	. x	Barbados.
<i>Pissonotus brasiliensis</i> Muir x	. .	. .	. .	. .	. .	Brazil.
<i>Phrictopyga contorta</i> (Muir) x	Brazil, Puerto Rico.
<i>P. semele</i> *	. .	. x	. .	. .	. .	. .	. .	. .	. .	. .
<i>P. nugax</i> *	. .	. x	. .	. .	. .	. .	. .	. .	. .	. .
<i>Euidella afasciata</i> C. & M. x	. .	. .	. .	. .	. .	Puerto Rico.
<i>Chloriona kolophon</i> Kirk. x	. .	. .	. .	. .	. x	Widespread.
<i>C. wallacei</i> Muir x	. .	. .	. .	. x	Cuba, Br. Honduras.
<i>C. cubana</i> Cwfd. x	. .	. .	. .	. .	. .	Venezuela, Cuba.
<i>Delphacodes humilis</i> V. D. x	. .	. .	. x	Guadeloupe.
<i>D. albinotata</i> (Cwfd.) x	. .	. .	. .	. .	Mexico.
<i>D. axonopi</i> Fenn. x	. .	. .	. .	. .	. .	. .	. .
<i>D. balboae</i> M. & G.	Mexico, Ecuador, Br. Guiana.
<i>D. havanae</i> M. & G.	. .	. x	. .	. .	. .	. .	. .	. .	. .	. x	Cuba, Guatemala, Br. Guiana.
<i>D. havanensis</i> Cwfd. x	Martinique, Cuba, Puerto Rico.
<i>D. propinqua</i> Fieber	. .	. x	. x	. x	. x	. x	. .	. .	. .	. .	Widespread.
<i>D. floridae</i> M. & G.	Florida.
<i>D. teapae</i> Fowl. x	. x	. x	. x	. .	. .	. .	. .	Ecuador to southern U.S.A.
<i>D. nigriacies</i> Muir x	. x	. x	. .	. .	. .	. .	Martinique, Costa Rica, Br. Guiana.
<i>D. venilia</i> * x	. .	. .	. .
<i>D. philyra</i> * x	. .	. .	. .	. .	. .
<i>D. iaxartes</i> *	

(* Described below as new.)

Two species described from Venezuela by Lethierry, *Araeopus conspersinervis* and *Dichoneura simoni*, stated to be akin to *Delphax*, are still unplaced in genera as currently recognized in this family. The first is dealt with below: *Dichoneura*, on the other hand, has no place in the Delphacidae. A specimen standing under this name in the Lethierry collection in the Paris Museum agrees with the original description, and is a tropiduchid closely allied to the Colombian *Cixius rufimacula* Wlk. and also close to, and possibly congeneric with, *Colgorma diluta* (Stål).

KEY TO SUBFAMILIES AND TRIBES OF LESSER ANTILLEAN DELPHACIDAE

1. Post-tibial spur subulate or spine-like, devoid of lateral teeth ASIRACINAE
 - Post-tibial spur with teeth on posterior margin (Delphacinae *pars*) 2
 2. Post-tibial spur convex on both sides, occasionally flattened on one surface, marginal teeth not exceeding 17 ALOHINI
 - Post-tibial spur concave on one surface, marginal teeth commonly exceeding 17 DELPHACINI

Subfamily ASIRACINAE

KEY TO WEST INDIAN GENERA OF ASIRACINAE

1. Antennae long, both segments broad, flattened and foliaceous *Copicerus* Swartz
 - Antennae not foliaceous 2
 2. Antennae long, narrowly cylindrical, frons elongate *Ugyops* Guérin-Méneville
 - Antennae not long or not cylindrical, frons rather broad 3
 3. Frons with two carinae enclosing a median area; antennae not compressed *Pentagramma* Van Duzee
 - Frons ecarinate or with a feeble median carina, antennae laterally compressed *Punana* Muir

Genus *UGYOPS* Guérin-Méneville

Guérin-Méneville, 1834, *Voy. aux Indes Belanger*, 1: 477. Haplotype, *Ugyops percheronii* Guérin-Méneville, *ibid.*: 478.

After examining material of this genus from almost all parts of its tropical range, the writer considers that the current division of the natural group of Central American species into three full genera, *Ugyops*, *Eucanyra* and *Epibidis*, is unwarranted.

Ugyops flagellata (Fennah)

Eucanyra flagellata Fennah, 1945, *Proc. U.S. nat. Mus.* 95: 426.

Anal segment about twice as long as broad, telson scarcely one-third as long as anal segment. The longer aedeagal spinose process comparatively stout, not filamentous.

Two ♂, 1 ♀, Trinidad, T.W.I., Central Experiment Station, near Arima, La Réunion section Mar. 1950, R. G. Fennah, in cacao field. The most distinctly marked of these specimens has a frons with nine pale round spots on each side of the median carina, and four pale round spots near each lateral margin in the distal half; the clypeus is stramineous except apically, where it is fuscous. Caldwell & Martorell list three species from Puerto Rico, *U. osborni* Metc., *U. occidentalis* Muir and *U.*

isolata C. & M.; the more obvious differences between these species and *U. flagellata* are as follows. In *U. flagellata* the median carina of the frons is single and sharply defined in its distal half, and single, though broadening basad, in its basal half; even near the base of the frons no concavity is developed in the raised median area. The shape of the head in profile is near to that of *U. occidentalis*, as is also the tegminal coloration, but the markings on the frons are quite different. The genitalia do not agree precisely in any one feature with those of any of the Puerto Rican species, and the only close similarity which exists is in the aedeagal structure of *U. flagellata* and *U. osborni*. The genital styles of *U. flagellata* resemble those of *U. osborni*, and differ from those of the other two species in so far as they are produced caudad in a lobe at their base. This appears as a quadrate projection when the style is viewed from the side.

Genus *PUNANA* Muir

Muir, 1913, *Proc. Hawaii ent. Soc.* 2: 249. Orthotype, *Punana brunnea* Muir, 1913, loc. cit.: 249.

Punana dominicana sp. n.

(Text-fig. I, A-D)

Width of vertex across basal margin slightly greater than twice length in middle line to apex of head.

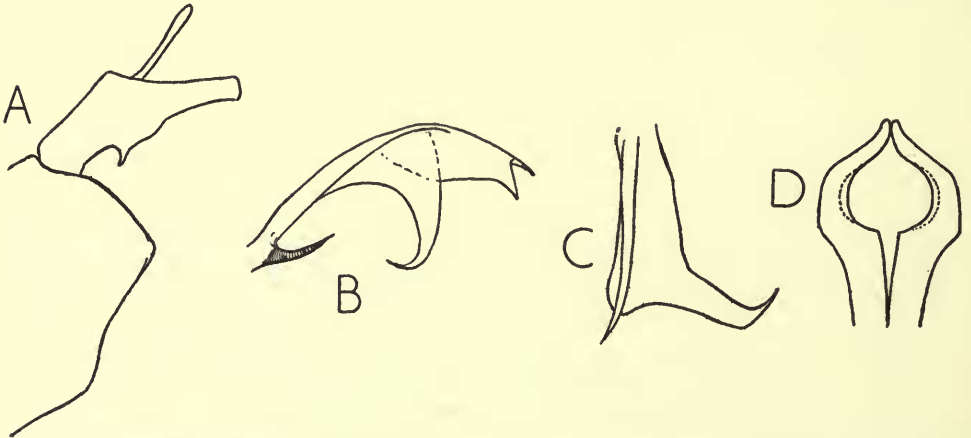


FIG. 1. *Punana dominicana* sp. n.: A, pygofer and anal segment, left side; B, aedeagus, distal portion, right side; C, aedeagus, distal portion, dorsal view; D, genital styles.

Frons with lateral margins diverging from base to level of antennae, thence incurved to frontoclypeal suture, length in middle line about equal to width at widest part. Pronotum in middle line about as long as vertex.

Yellowish-testaceous; distal two-thirds of frons and lower surface of body, except genitalia, ivory-white to stramineous. Two shallowly arcuate transverse marks on vertex, median area and lateral margins of clypeus, antennae in part,

a spot on femora at apex, two spots on protibiae and mesotibiae, and three on post-tibiae, and all tarsi at base, fuscous. Tegmina hyaline, faintly tinged with yellow, veins concolorous, heavily studded with fuscous granules, each bearing a fuscous seta, a linear mark at middle of commissural margin of clavus, a small suffusion near the apical angle and another near the anal angle, and a spot on M at nodal line, fuscous. Wings hyaline.

Anal segment of male moderately short, asymmetrical, with right lower margin feebly sinuate, left lower margin produced ventrad at middle in a delicate spinose process. Pygofer very slightly asymmetrical, lateral margins angulately produced caudad. Aedeagus narrowly tubular and shallowly curved in basal half, produced on right near junction with flagellum in a thin triangular lobe; flagellum comprising a pigmented process from which depends on the right side a pellucid lamina not quite extending to its tip; an unpigmented lamina on left side of flagellum strongly produced to left apically in a tapering flattened process, directed ventrad on lower surface of flagellum near its middle. Genital styles sinuate, broadest in basal half, shaped as figured.

Male: length, 4.5 mm.; tegmen, 5.0 mm. Female: length, 5.1 mm.; tegmen, 5.0 mm.

Holotype male and 3 ♂ and 6 ♀, Dominica, T.W.I., Greenhill Estate, June 1940, R. G. Fennah. This species is distinguished by the bold fuscous and brown markings and by the shape of the male genitalia. It seems to be nearest to *P. caribbensis* Caldwell & Martorell, but differs in the shape of the genital styles. In the aedeagus the elements are approximately similar but are reversed—the long apical lateral extension is definitely to the left side, not to the right. The right apical process is porrect, not decurved. The anal segment is differently shaped from that of *P. caribbensis*.

Punana dolon sp. n.

(Text-fig. 2, A-D)

Width of vertex across basal margin exactly twice length in middle line to apex of head. Frons with lateral margins diverging from base to above level of antennae, then feebly converging for some distance, finally strongly incurved to suture, length in middle line equal to or slightly exceeding maximum width. Pronotum in middle line slightly shorter than vertex.

Stramineous; yellowish-brown on basal half of frons and anterior surface of antennae. Faint yellowish-brown markings on vertex and mesonotum as in *P. dominicana*. Lower surface of body, including clypeus and male genitalia, pallid; banding on legs as in *P. dominicana*, but faint. Tegmina yellowish-hyaline, veins concolorous, granules narrowly outlined with yellowish-brown. Wings hyaline with veins concolorous.

Anal segment of male moderately short, bilaterally symmetrical or practically so, lower margin in side view concave basally and deeply convex distally. Pygofer with each lateral margin broadly produced caudad in a convex lobe. Aedeagus narrowly tubular and shallowly curved in basal half, produced laterad in a rounded lobe near

junction with flagellum ; flagellum comprising a tapering curved pigmented process, from which a pellucid membrane hangs down along the right side as far as the apex, though a little separated from the pigmented portion near its tip ; on left side the pigmented process is produced to left distally in a parallel-sided transparent process which is truncate apically where it bears a pair of slender reflexed spinose processes. Genital styles sinuately curved, broadest in basal half, shaped as in figure.

Male : length, 4.4 mm.; tegmen, 3.9 mm.

Holotype male, St. Kitts, T.W.I., Sept. 1943, R. G. Fennah.

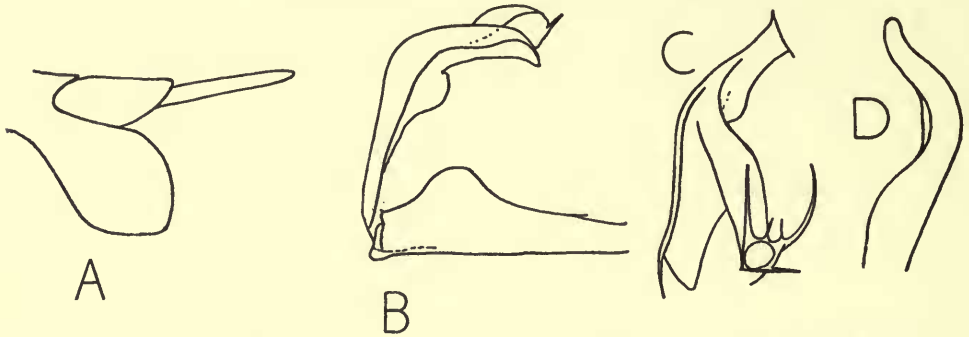


FIG. 2. *Punana dolon* sp. n.: A, anal segment, left side ; B, aedeagus, right side ; C, aedeagal flagellum, dorsal view ; D, right genital style, posterior view.

This species differs from *P. dominicana* in the proportions of the frons and vertex, and in the shape of every element of the male genitalia. It would seem to belong to the *P. caribbensis* group but cannot be confused with any other species. A single female from Montserrat, T.W.I. (Jan. 1939, R. G. Fennah) has the same cephalic proportions as the male from St. Kitts and is provisionally assigned to this species. The ground coloration is similar to that of the St. Kitts male, but all the brown coloration is a little darker, though not nearly so dark as in *P. dominicana*.

Subfamily DELPHACINAE

Tribe ALOHINI

KEY TO THE ALOHINI OF THE NEW WORLD

- | | |
|---|-------------------------|
| 1. Antennae with basal segment cylindrical, long or short | 2 |
| – Antennae with basal segment more or less flattened | 3 |
| 2. Vertex four times as wide as long. Antennae with basal segment little, if any, longer than broad | <i>Synpteron</i> Muir |
| – Vertex not wider than long. Antennae with basal segment much longer than broad | <i>Burnilia</i> M. & G. |
| 3. Antennae with basal segment long, narrow, parallel-sided, with a longitudinal carina | <i>Sparnia</i> Stål |
| – Antennae with basal segment subtriangular or sagittate | <i>Stobaera</i> Stål |

Genus *BURNILIA* Muir & Giffard

Muir & Giffard, 1924, *Hawaii Sug. Pl. Ass. ent. Bull.* 15 : 7. Orthotype, *Delphax pictifrons* Stål.

Burnilia pictifrons (Stål)

Delphax pictifrons Stål, 1864, *Stett. ent. Zeit.* 25 : 50.

One ♂, 3 ♀, Venezuela, E. Zulia, Perija, Rio Negro, Kumana Hoya, 600 m., 20th Dec., 1950, La Salle.

Burnilia spinifera Fenn.

Fennah, 1945, *Proc. U.S. nat. Mus.* 95 : 429.

Burnilia spinifera antillana ssp. n.

(Text-fig. 3, A, B)

Vertex longer in middle line than broad at base (1.3 : 1), base twice as broad as apex, lateral margins straight, apex projecting markedly beyond eyes, base posterior

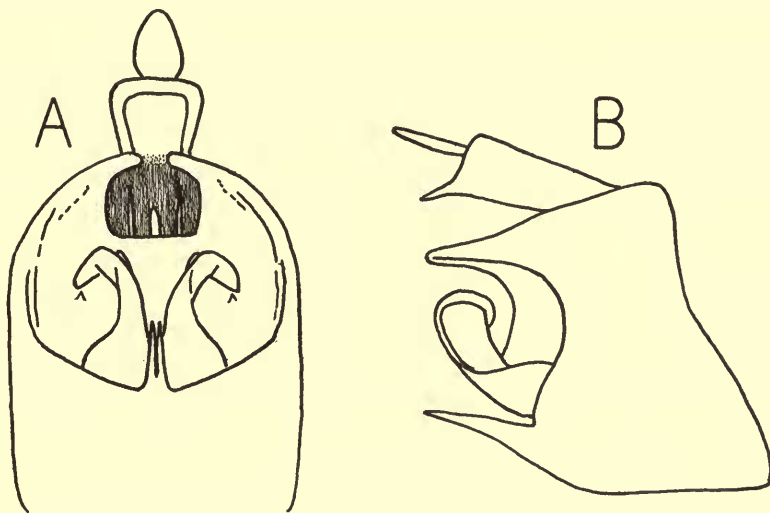


FIG. 3. *Burnilia spinifera antillana* ssp. n.: A, male genitalia, posterior view ; B, the same, right side.

to middle of eyes. Frons longer than broad at apex (1.8 : 1), basal two-thirds of lateral margins straight, diverging, slightly arcuate on apical third, disc slightly concave in middle, median carina simple, distinct ; median carina of clypeus prominent. Antennae reaching approximately to apex of clypeus, second segment longer than first (2.6 : 1). Post-tibial spur with 15-17 teeth.

Stramineous ; lateral margins of vertex and frons narrowly piceous, frons traversed medially by a white band which is bordered basally and apically with piceous, the basal piceous band wider than the apical ; a white spot, bordered fuscopiceous, on each lateral pronotal lobe ; second antennal segment dark on anterior surface, a small dark mark at apex of all femora. Tegmina hyaline, slightly tinged yellowish, veins concolorous. Wings hyaline with concolorous veins.

Anal segment of male rather short, a little deflexed apically, anal foramen at apex, apical margin transverse. Pygofer long, laterodorsal angles each strongly produced caudad for more than length of anal segment, narrowly rounded distally, lateral margins sinuate, weakly convexly produced at middle; medioventral process long, parallel-sided, deeply bifid; diaphragm extensive, dorsal margin short, subrectangulately excavate, with a straight slender spinose process arising on each side of middle, directed dorsad; lateroventrally a small slender spine, lying almost anterior to genital styles, directed dorsocaudad. Genital styles moderately long, rather broad, laterally compressed, strongly curved in side view, in posterior view apposed basally then diverging, moderately decurved at apex and bluntly pointed, a spinose process arising mesodorsally curved almost parallel with apical portion of style. Aedeagus very slender, cylindrical at least in distal part where it lies against diaphragm, acuminate at apex.

Male: length, 4.7 mm.; tegmen, 4.1 mm. Female: length, 4.9 mm., tegmen, 5.1 mm.

Holotype male of subspecies and 2 ♀, St. Vincent, T.W.I., Morne Garu, Aug. 1941, R. G. Fennah, on *Heliconia* sp. This subspecies differs from the typical subspecies in minor points of coloration, and markedly in the male genitalia, where the upper lateral spines on the diaphragm are absent (present in the typical subspecies) and, the genital styles are rounded at the apex, not obliquely truncate. One female, Dominica, T.W.I., Saltoun, May 1941, R. G. Fennah, is assigned to this species.

Burnilia belemensis Muir

Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 5.

One ♀, 5 nymphs, Venezuela, Yaracuy, Marin, 125 m., 6th July, 1951, H. E. Box. The clypeus and mesonotum of the adult are lighter in hue than the coloration given for the typical population.

Genus *SPARNIA* Stål

Stål, 1862, *Handl. svensk. Vet. Akad.* 3 (6) : 6. Haplotype, *Sparnia praecellens* Stål.

Sparnia praecellens Stål

Stål, 1862, *Handl. svensk. Vet. Akad.* 3 (6) : 6.

Three ♀, Venezuela, E. Zulia, Perija, Rio Negro, Kumana Hoya, 1, 100 m., 22nd Dec., 1950, La Salle.

Genus *STOBAERA* Stål

Stål, 1859, *Berl. ent. Z.* 3 : 327. Haplotype, *Delphax concinna* Stål, 1854, *Öfvers. vetensk Akad. Förh., Stockh.* 11 : 246.

Osborn has reported *Stobaera tricarinata* Say from Cuba (1926, *Sci. Contr. Trop. Pl. Res. Found.* 2 : 358) and from Puerto Rico (1929, *J. Dept. Agric. P.R.* 13 : 110), but Caldwell & Martorell were unable to confirm the latter. The presence of a species of the genus in St. Lucia, however, lends a little support to the Puerto Rican record.

Stobaera sp.

(Text-fig. 4, A, B)

Median carina of frons not forked, nor thickened basally. Frons not quite as broad at base as at apex, lateral margins parallel, frons narrowed between eyes. Eyes reniform, deeply excavate. Antennae with basal segment about as long as second, and fully twice as broad as second. Post-tibial spur with five teeth on margin.

Apex of clypeus, rostrum, mesoscutellum, fore and middle legs distad of trochanters, hind legs entirely, and anal segment of female pallid cream or white. Remainder of head and body more or less uniformly testaceous, tinged with red, antennae, basal margin of frons, apical margin of vertex and a W-shaped band across middle of vertex darker than remainder. Tegmina with granulation concolorous with veins, corium yellowish-testaceous, transparent, a suffusion along costal margin to node, fuscous, membrane fuscous except for a rounded-triangulate

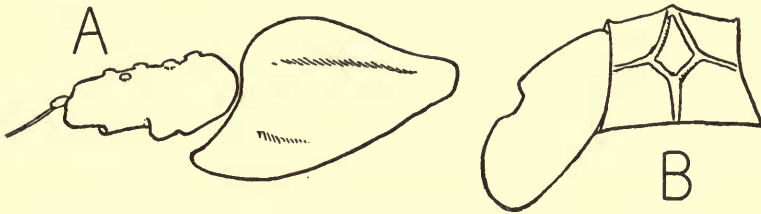


FIG. 4. *Stobaera* sp.: A, antenna; B, vertex and left eye.

area between node, M_{3+4} and apical angle; veins concolorous. Wings hyaline with faintly stramineous veins.

Female: length, 3.4 mm.; tegmen, 3.6 mm.

One ♀, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah. This appears to differ from all described species by its coloration and by the number of teeth on the post-tibial spur. It is preferable that it should remain unnamed until the genitalia of a male can be examined, and the description be amplified.

In 1890 Lethierry described a delphacid from Venezuela under the name *Araeopus conspersinervis* (Lethierry, 1890, *Ann. Soc. ent. Fr.* (6) 10: 151). His description is brief, and the generic assignment implies the presence of antennae like those of the European *D. crassicornis* Panz. In the known delphacid fauna of the circum-caribbean area only *Punana* and *Stobaera* and *Neoperkinsiella* have such antennae, and only the first two have tegmina with pallid veins bearing dark granules. Of these only *Stobaera* has a tricarinate mesonotum and tegmina reaching far beyond the apex of the abdomen. The original description cites the frons as being tricarinate: this is here taken to mean that the lateral margins are carinate in the same manner and degree as the median carina. The generic characters of *Stobaera* alone fit the description given, and it must be considered possible that *A. conspersinervis* is a member of this genus.

Tribe DELPHACINI

KEY TO THE DELPHACINI OF THE LESSER ANTILLES

1. Antennal segments each with a longitudinal black stripe. Aedeagus short, with a very long, slender coiled subfilamentous appendage 2
- Antennal segments devoid of such a stripe. Aedeagus tubular, even if narrow; appendage, if present, not coiled and not very long 3
2. Antennae reaching to frontoclypeal suture, second segment longer than first
Saccharosydne Kirk.
- Antennae reaching to apex of clypeus, segments of equal length *Neomalaxa* Muir.
3. Head with eyes distinctly narrower than pronotum, so that outline of body tapers strongly cephalad from base of tegmina. Frons with median carina forked some distance before base 4
- Head with eyes not or only little narrower than pronotum; bodily outline only weakly tapering cephalad from base of tegmina. Frons with median carina simple, or forked very close to base, only rarely forked between eyes 5
4. Postfemora only as long as post-tibiae from base to second lateral spine. Antennae pale, with segments dark at base and at apex *Peregrinus* Kirk.
- Postfemora clearly surpassing second lateral spine of post-tibiae, not much less than total length of post-tibiae. Antennae fuscous *Pissonotus* Van Duzee
5. Basal metatarsal segment longer than second and third together. Profemora considerably longer than procoxae *Euidella* Puton
- Basal metatarsal segment not or only little longer than second and third. Profemora only a little longer than procoxae 6
6. Vertex a little longer than broad. Head and thorax usually with a white median dorsal stripe. Lateral carinae of pronotum straight, reaching hind margin
Chloriona subg. *Sogatella* Fenn.
- Vertex not longer than broad, no white medial stripe on head and thorax. Lateral carinae of pronotum curved, not reaching hind margin *Delphacodes* Fieber

Genus *SACCHAROSYDNE* Kirkaldy

Kirkaldy, 1907, *Hawaii Sug. Pl. Ass. ent. Bull.* 3 : 139. Orthotype, *Delphax saccharivora* Westw

Saccharosydne saccharivora (Westw.)

Delphax saccharivora Westwood, 1833, *Mag. nat. Hist.* 6 : 413.

One ♂, Jamaica, T.W.I., Hope, Mona House, Nov. 1940, R. G. Fennah. One ♂, 1 ♀, Grenada, T.W.I., Oct. 1943, R. G. Fennah. Two ♀, St. Lucia, T.W.I., Mar. 1939, R. G. Fennah. Urich (Urich, 1912, *West Indian Bulletin*, 12 : 390) recorded this species (as *Stenocranus saccharivora*) in Trinidad, and the writer has confirmed its presence. Four mutilated specimens, Venezuela, Tacarigua, Carabobo, 420 m., P. Guagliumi, May 1950; Carabobo, Urama 20 m., 17th Aug., 1950, H. E. Box.

Saccharosydne ornatipennis Muir

Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 14.

One ♀ and one mutilated specimen, St. Lucia, T.W.I., Roseau, 4th Sept., 1935, H. E. Box. These interesting captures were seen by the writer in St. Lucia in 1936

and are now in the British Museum. They agree well in the structure of the head and in the venation with two of Muir's series from Brazil.

Genus *NEOMALAXA* Muir

Muir, 1918, *Proc. Hawaii ent. Soc.* 3 : 426. Haplotype, *Neomalaxa flava* Muir.

Neomalaxa flava Muir

Muir, 1918, *Proc. Hawaii ent. Soc.* 3 : 427.

Post-tibial spur with 15 or 16 teeth.

Twenty-five ♂, 29 ♀ and 38 nymphs, St. Lucia, T.W.I., Quillesse, 21st Feb., 1941, R. G. Fennah, abundant on grass. Fifteen ♂, 18 ♀ and 64 nymphs, Dominica, T.W.I., June 1939, R. G. Fennah. Muir (Muir, 1926, *Hawaii Sug. Pl. Ass. Ent. Bull.* 18 : 15) has reported this species from Trinidad. One mutilated specimen, Venezuela, Maracay, 450 m., 12th Dec., 1949, H. E. Box.

Genus *PEREGRINUS* Kirkaldy

Kirkaldy, 1904, *Entomologist*, 37 : 175. Orthotype, *Delphax maidis* Ashmead.

Peregrinus maidis (Ashm.)

Delphax maidis Ashmead, 1890, *Psyche*, 5 : 323.

Two ♂, 5 ♀, Grenada, T.W.I. Oct. 1943, R. G. Fennah ; 2 ♂, 7 ♀ and 31 nymphs, St. Vincent, T.W.I., Agricultural Station, Mar. 1941, R. G. Fennah ; 2 ♂ 8 ♀ and 1 nymph, St. Lucia, T.W.I., May 1939, R. G. Fennah ; 1 ♂, Dominica, T.W.I., July 1939, R. G. Fennah ; 34 ♂, 51 ♀ and 15 nymphs, Antigua, T.W.I., Aug. 1945, R. G. Fennah ; 10 ♂, 16 ♀, Nevis, T.W.I., 16th Jan., 1942, R. G. Fennah ; 20 ♂, 35 ♀ and 150 nymphs, St. Kitts, T.W.I., Basseterre, 7th Sept., 1943, R. G. Fennah on sorghum ; 4 ♂, 3 ♀, Jamaica, T.W.I., Hope, Mona House, Nov. 1940, R. G. Fennah.

Genus *PISSONOTUS* Van Duzee

Van Duzee, 1897, *Bull. Buff. Soc. nat. Sci.* 5 : 236. Orthotype, *Pissonotus marginatus* Van Duzee, loc. cit. : 236.

Pissonotus brazilensis Muir

Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 19.

Five ♂, 4 ♀, St. Lucia, T.W.I., May 1939, R. G. Fennah.

Genus *PHRICTOPYGA* Caldwell

Caldwell & Martorell, 1950, *J. Agric. Univ. P.R.* 34 : 170. Orthotype, *Kelisia contorta* Muir.

Phrictopyga contorta (Muir)

Kelisia contorta Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 24.

Post-tibial spur with about 24 teeth, not 13 to 16 as in type series.

One ♂, Jamaica, T.W.I., Mona House, Nov. 1940, R. G. Fennah. The genus extends eastward to Puerto Rico, but no representative has yet been found in the Lesser Antilles.

Phrictopyga semele sp. n.

(Text-fig. 5, A-E)

Head with eyes distinctly narrower than pronotum. Vertex longer than broad at base (1.2 : 1), apical margin transverse, a little produced at middle, basal margin

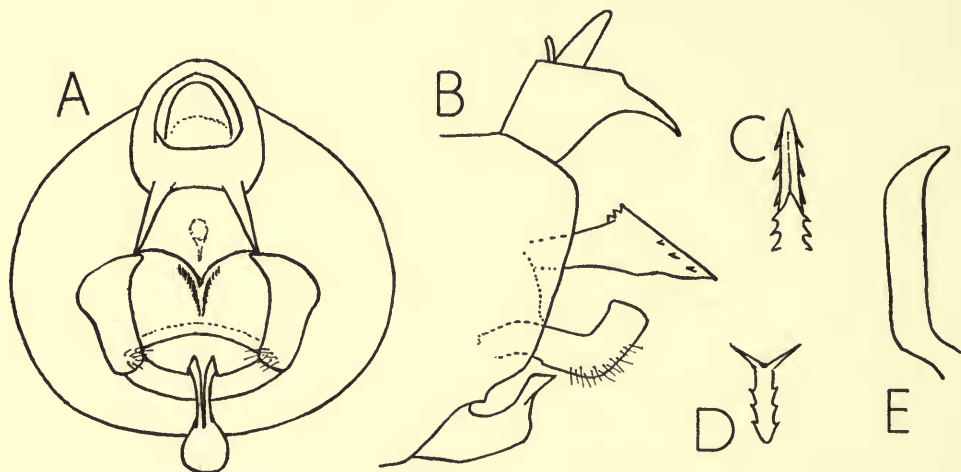


FIG. 5. *Phrictopyga semele* sp. n.: A, male genitalia, posterior view ; B, the same, left side ; C, apex of aedeagus, dorsal view ; D, the same, posterior view ; E, apical half of left genital style, ventral view.

level with middle of eyes, fully as wide as an eye in same line. Frons twice as long as broad, slightly broader at apex than at base, lateral margins shallowly convex ; antennae reaching to base of clypeus, first segment scarcely longer than broad, second segment twice as long as first. Pronotum with lateral carinae straight, diverging caudad, nearly but not quite attaining hind margin. Basal metatarsal segment longer than second and third together, spur about half as long as basal metatarsal segment, rather narrow, with about 20 teeth on posterior margin.

Pallid stramineous ; vertex, pronotum and mesonotum medially creamy-white ; intercarinal areas of frons, a stripe on each side bordering pallid median band of pronotum and mesonotum, and three spots on each side of pronotum laterad of discal carinae, testaceous-fuscous. Tegmina hyaline, slightly tinged yellow, a dilute fuscous mark overlying each apical vein at margin. Wings hyaline, veins concolorous.

Anal segment short, ring-like, apical margin shallowly concave, lateroapical angles strongly produced laterocaudad and ventrad in a pair of stout spines. Posterior opening of pygofer distinctly broader than long, anal emargination not deep, latero-dorsal angles not produced, lateral margins shallowly convex, ventral margin medially produced dorsocaudad in a narrowly triangular process shortly bifurcate at its apex, diaphragm rather large and deep, pigmented in median portion which is biconvex on its dorsal margin and is acutely produced caudad in its middle line. Aedeagus not long, laterally compressed, in side view with ventral margin longer than dorsal, a flange dorsally on each side bearing three teeth, a row of three widely-spaced teeth along oblique apical margin; orifice terminal on lower surface. Genital styles rather narrow and directed laterocaudad in basal half, broader and directed dorsad in apical half, apical margin convex-truncate with inner angle acute, outer angle obtusely rounded.

Male (macropterous): length, 2.6 mm.; tegmen, 2.8 mm. Female (macropterous): length, 3.0 mm.; tegmen, 4.0 mm.

Holotype male and 4 ♂ and 3 ♀, Trinidad, T.W.I., St. Augustine, Apr. 1934, R. G. Fennah, on *Axonopus compressus*. This species is near *P. fuscovittata* (Muir) but differs in the shape of the spines on the anal segment, of the aedeagus, and of the genital styles. The post-tibial spur has fewer teeth than *fuscovittata*, which has 25 to 27.

Phrictopyga nugax sp. n.

(Text-fig. 6, A-F)

Head with eyes distinctly narrower than pronotum. Vertex longer than broad at base (about 1.5 : 1), basal margin about as broad as apex, apical margin sinuately transverse, slightly produced at middle, basal margin just distad of middle of eyes, as wide as an eye in same line. Frons longer than broad (about 2.3 : 1), slightly broader at apex than at base, lateral margins shallowly convex. Antennae reaching slightly beyond base of clypeus, first segment distinctly longer than broad, second segment longer than first (about 1.5 : 1). Pronotum with lateral carinae straight, diverging caudad, almost but not quite reaching hind margin. Basal metatarsal segment longer than second and third together, spur about three-quarters of length of basal metatarsal segment, narrowly triangular, with 21-25 teeth.

Pallid stramineous; vertex, pronotum and mesonotum medially, creamy-white; intercarinal areas of frons and clypeus and anterior part of genae and a mark in each field of pronotal disc fuscous; abdomen dorsally castaneous, except along middle line; abdomen ventrally, pygofer and genital styles lighter castaneous. Tegmina hyaline, a mark between M and Cu to apex, a linear mark in clavus at base and a mark near apex of commissural margin of clavus, dilute fuscous. Wings hyaline, veins concolorous.

Anal segment short, ring-like, apical margin transverse, devoid of spinose ornamentation. Posterior opening of pygofer a little longer than broad, anal emargination moderately large, laterodorsal angles only feebly produced, lateral margins in side view feebly triconcave, ventral margin medially produced dorsocaudad in

a broadly triangular process, acute at its apex, not bifid; diaphragm rather broad, pigmented throughout its median portion, dorsal margin evenly and shallowly convex. Aedeagus narrowly cylindrical, slightly compressed laterally, directed caudad, eight or nine teeth forming a double row on ventral margin below orifice which lies on left dorsally. Genital styles moderately long, sickle-shaped, almost parallel-sided at base, then strongly curved laterad then mesad, and feebly recurved a little at bluntly pointed apex.

Male (macropterous): length, 3.0 mm.; tegmen, 3.6 mm.

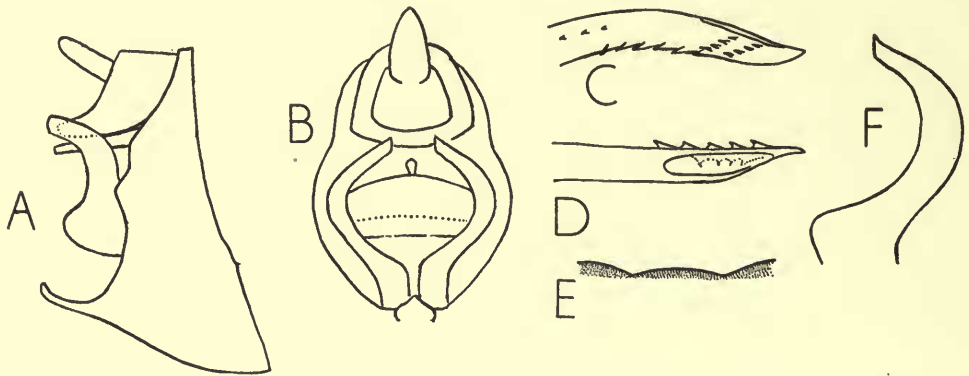


FIG. 6. *Phrictopyga nugax* sp. n.: A, male genitalia, right side; B, the same, posterior view; C, aedeagus, left side; D, the same, dorsal view; E, dorsal margin of middle part of diaphragm; F, genital style, lateral view.

Holotype male, Trinidad, T.W.I., St. Augustine, Apr. 1941, R. G. Fennah, on *Axonopus compressus*. This species is perhaps nearest to *P. fuscovittata* Muir but differs in having the anal segment unarmed and the medioventral process of the pygofer, the aedeagus and the genital styles differently shaped.

Genus *EUIDELLA* Puton

Puton, 1886, *Cat. Hémipt. Faune Paléarctique*: 72. Logotype, *Delphax basilinea* Germar, 1821, *Mag. Ent.* 4: 105.

Euidella afasciata Caldwell

Caldwell & Martorell, 1950, *J. Agric. Univ. P.R.* 34: 190.

One ♂, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah.

Genus *CHLORIONA* Fieber

Fieber, 1866, *Verh. zool. bot. Ges. Wien.* 16: 522. Logotype, *Delphax unicolor* Herrich-Schaffer, 1835, *Nom. Ent.* 1: 66.

Subgenus **SOGATELLA** Fennah

Fennah, 1956, *Ins. of Micronesia*, 6 (3) : 115. Orthotype of subgenus, *Delphax furcifera* Horvath, 1899, *Term. Fuzetek.* 22 : 372.

Chloriona (Sogatella) kolophon (Kirk.)

Delphax kolophon Kirkaldy, 1907, *Hawaii Sug. Pl. Ass. ent. Bull.* 3 : 157.

One ♂, Jamaica, T.W.I., Hope, Mona House, Nov. 1940, R. G. Fennah. One ♂, Montserrat, T.W.I., Jan. 1939, R. G. Fennah. One ♂, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah. Nine ♂, 2 ♀ Venezuela, Maracay, 4th, 6th June, 1951, H. E. Box.

Chloriona (Sogatella) wallacei (Muir) *comb. n.*

Sogata wallacei Muir & Giffard, 1924, *Hawaii Sug. Pl. Ass. ent. Bull.* 15 : 13.

One ♂, Jamaica, T.W.I., Hope, Mona House, Nov. 1940, R. G. Fennah. One ♂, Dominica, T.W.I., Goodwill Estate, May 1941, R. G. Fennah.

Chloriona (Sogatella) cubana (Crawford) *comb. n.*

Dicranotropis cubanus Crawford, 1914.

Eleven ♂, St. Lucia, T.W.I., Choiseul, 5th May, 1939; Union Experimental Station, Nov. 1939, R. G. Fennah. One ♂, Venezuela, Maracay, 450 m., 20th June, 1951, H. E. Box.

Chloriona (Sogatella) approximata (Crawford) *comb. n.*

Megamelus approximatus Crawford, 1914, *Proc. U.S. nat. Mus.* 46 : 622.

One ♂, 1 ♀, Peru, Pativilca Valley, 10th Sept., 1949, H. E. Box, on sugarcane.

Chloriona (Sogatella) orizicola (Muir) *comb. n.*

Sogata orizicola Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 27.

Two ♂, Venezuela, Maracay, 4th June, 1951, H. E. Box.

Chloriona (Sogatella) nautica (Muir) *comb. n.*

Sogata nautica Muir, 1926, *Hawaii Sug. Pl. Ass. ent. Bull.* 18 : 26.

One ♂, Venezuela, Maracay, 4th May, 1951, H. E. Box.

Genus **DELPHACODES** Fieber

Fieber, 1866, *Verh. zool. bot. Ges. Wien*, 16 : 524. Logotype, *Delphax mulsanti* Fieber, 1866, loc. cit. : 526.

Delphacodes humilis (Van Duzee)

Liburnia humilis Van Duzee, 1907, *Bull. Buff. Soc. nat. Sci.* 8 : 48.

One ♂, Montserrat, T.W.I., Dec. 1938, R. G. Fennah.

Delphacodes albinotata (Crawford)

Megamelus teapae albinotatus Crawford, 1914, *Proc. U.S. nat. Mus.* 46 : 619.

One ♂, Dominica, T.W.I., June 1939, R. G. Fennah.

Delphacodes axonopi Fennah

Fennah, 1945, *Proc. U.S. nat. Mus.* 95 : 434.

One ♂, St. Lucia, T.W.I., Union Experimental Station, Nov. 1939, R. G. Fennah.

One ♂, Venezuela, Maracay, 4th June, 1951, H. E. Box.

In the aedeagus of this species the orifice is quite definitely on the left side and is bounded on its basal margin with four or five teeth.

Delphacodes balboae Muir & Giffard

Muir & Giffard, 1924, *Hawaii Sug. Pl. Ass. ent. Bull.* 15 : 36.

One ♂, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah. One ♂, Venezuela, Maracay, 4th June, 1951, H. E. Box.

Delphacodes havanae Muir & Giffard

Muir & Giffard, 1924, *Hawaii Sug. Pl. Ass. ent. Bull.* 15 : 37.

One ♂, Jamaica, T.W.I., Hope, Mona House, Nov. 1940, R. G. Fennah ; 4 ♂, Trinidad, T.W.I., St. Augustine, Oct. 1952, R. G. Fennah, on *Axonopus compressus*. Five ♂, 2 ♀, Venezuela, Maracay, 450 m., 31st May, 4th, 20th June, 1951, H. E. Box.

Delphacodes havanensis (Crawford)

Megamelus albidens havanensis Crawford, 1914, *Proc. U.S. nat. Mus.* 46 : 622.

One ♂, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah.

Delphacodes propinqua Fieber

Delphax propinqua Fieber, 1866, *Verh. zool. bot. Ges. Wien*, 16 : 525.

Twenty-five ♂, 46 ♀, and 15 nymphs, Montserrat, T.W.I., Plymouth, Feb. 1940, R. G. Fennah. Two ♂, Dominica, T.W.I., Saltoun, June, 1939, R. G. Fennah. Six ♂, 8 ♀, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah. One ♂, 1 ♀, St. Vincent, T.W.I., Three Rivers, Sept. 1941, R. G. Fennah. One ♂, Grenada, T. W.I., Tempe Valley, Oct. 1943, R. G. Fennah. Five ♂, 4 ♀, Trinidad, T.W.I., St.

Augustine, 29th Nov., 1938, E. McC. Callan, on *Axonopus compressus*. Two ♂, Venezuela, Maracay, 450 m., 20th June, 1951, H. E. Box.

Delphacodes floridae Muir & Giffard

Muir & Giffard, 1924, *Hawaii Sug. Pl. Ass. ent. Bull.* 15 : 33.

D. floridae puertoricensis Caldwell

Caldwell & Martorell, 1950, *J. Agric. Univ. P.R.* 34 : 185.

One ♂, Montserrat, T.W.I., Plymouth, Jan. 1939, R. G. Fennah.

Delphacodes teapae (Fowler)

Liburnia teapae Fowler, 1905, *Biol. Cent.-Amer. Homopt.* 1 : 135.

Three ♂, Montserrat, T.W.I., Plymouth, Jan. 1939, R. G. Fennah. Eight ♂, 6 ♀, Dominica, T.W.I., Copt Hall, June 1939, R. G. Fennah. Thirteen ♂, 10 ♀, St. Lucia, T.W.I., Choiseul, 5th May, 1939, R. G. Fennah. Three ♂, St. Vincent, T.W.I., Mar. 1941, R. G. Fennah. Fifteen ♂, 12 ♀, and 6 nymphs, Trinidad, T.W.I., St. Augustine, 20th Dec., 1950, R. G. Fennah, on *Axonopus compressus*.

Delphacodes nigrifacies Muir

Muir, 1918, *Proc. Hawaii ent. Soc.* 3 : 428.

One ♂, 1 ♀, Montserrat, T.W.I., Plymouth, May 1941, R. G. Fennah. Twenty-five ♂, 31 ♀, Dominica, T.W.I., Greenhill, July 1939, R. G. Fennah. Ten ♂, 6 ♀, St. Lucia, T.W.I., Volet-Quillesse Road, Nov. 1939, R. G. Fennah. Seventy-one ♂, 43 ♀ and 52 nymphs, St. Vincent, T.W.I., Three Rivers, Sept., 1941, R. G. Fennah. One ♂, 2 ♀, Venezuela, Maracay, 450 m., 4th, 20th, June 1951, H. E. Box.

Delphacodes venilia sp. n.

(Text-fig. 7, A-C)

Head with eyes as broad as pronotum.

Vertex quadrate, as long as broad at base, apex a little narrower than base, transverse but angulately produced at middle, base distad of middle of eyes. Frons longer than broad (2 : 1) widest at middle, lateral margins arcuate. Antennae reaching nearly to middle of clypeus, second segment twice as long as first. Pronotum with lateral carinae concave, not reaching hind margin. Post-tibial spur with 13 teeth.

Stramineous; frons and clypeus between carinae, basal segment of antennae, pleurites of thorax, abdominal tergites in part, genital styles and pygofer except dorsally, dilute yellowish-brown, posterior lateral margins of pygofer pallid or creamy. Tegmina (brachypterous) hyaline faintly tinged yellowish, apical margin pallid. Female coloured similar to male.

Anal segment of male very short, ring-like, apical angles each strongly produced ventrad in a stout curved spinose process, the processes well separated basally. Pygofer with laterodorsal angles strongly and broadly produced caudad, incurved at apex in a small blunt process; diaphragm very narrow at middle, heavily pigmented, dorsal margin slightly elevated at middle and median area slightly produced caudad, the armature polished. Aedeagus moderately long, slightly upcurved distad, orifice on left at apex, about five teeth round upper margin of orifice, descending slightly on left side, a row of teeth on each side ventrolaterally. Genital styles rather long, rather strongly produced caudad basally, where they meet in middle line, evenly shallowly concave on inner margin, outer margin angulately convex, apical margin sinuate, with inner angle narrowly produced, outer angle broadly acute.

Male (brachypterous): length, 2.0 mm.; female (brachypterous): length, 2.5 mm.

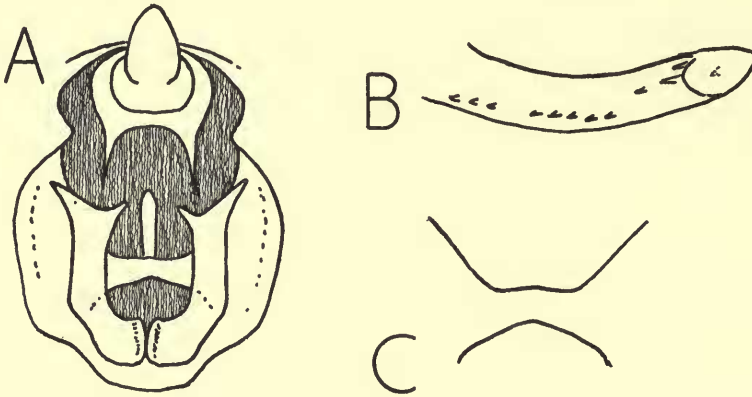


FIG. 7. *Delphacodes venilia* sp. n.: A, male genitalia, posterior view; B, aedeagus, left side; C, middle portion of diaphragm.

Holotype male and 20 ♂, and 13 ♀, Montserrat, T.W.I., near Plymouth, May 1940, R. G. Fennah. This species differs from *D. axonopi* Fenn. and *D. nigra* Cwfd. in the shape of the armature of the diaphragm, in the absence of a projection on the inner margin of the genital styles and in colour; from *D. propinqua* also it differs in the shape of the armature of the diaphragm and of the genital styles. It appears to be this species which Caldwell & Martorell have reported from Puerto Rico under the name *Delphacodes nigra* (1950: 183). It differs from *D. boxi* M. & G., from British Guiana, in the shape of the armature of the diaphragm and in coloration.

Delphacodes philyra sp. n.

(Text-fig. 8, A-C)

Head with eyes not as broad as pronotum. Vertex a little longer than broad (about 1.1:1), anterior margin transverse, slightly produced at middle, lateral margins weakly concave, apical margin as long as basal, basal margin distad of

middle of eyes, frons longer than broad (2.4 : 1), as wide at apex as at base, lateral margins weakly arcuate, frons widest at middle; antennae reaching to base of clypeus, basal segment distinctly longer than broad, second segment about 1.6 times length of first; ocelli prominent, supra-ocellar organ distinct, rostrum reaching to post-coxae, penultimate segment longer than apical. Pronotum in middle line about three-quarters of length of vertex in middle line, lateral discal carinae concave, not reaching hind margin. Basal metatarsal segment longer than other two segments combined, spur moderately broad with 18 teeth on margin.

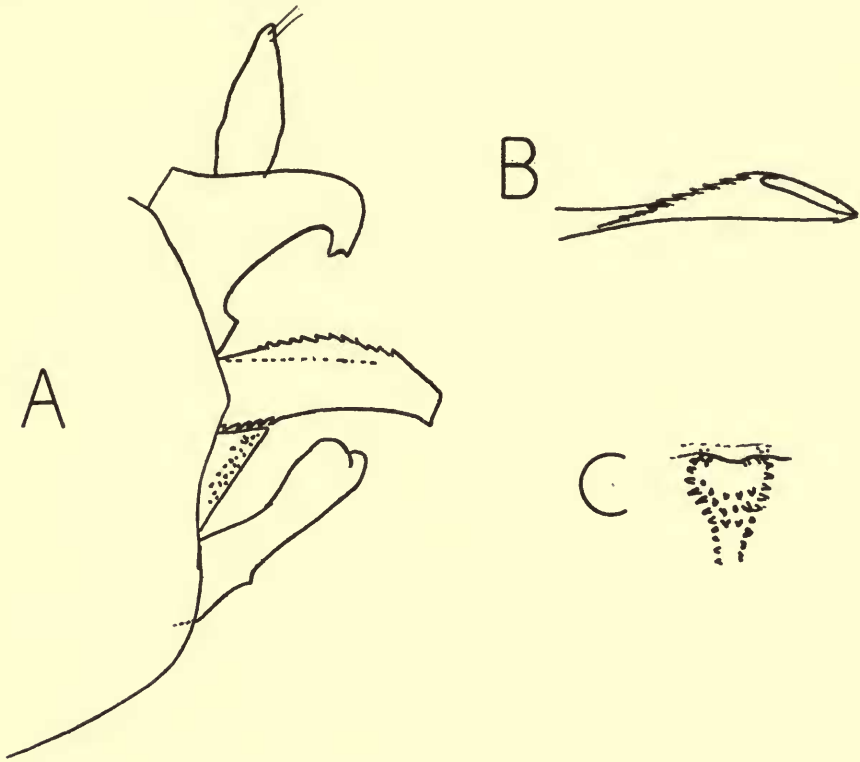


FIG. 8. *Delphacodes philyra* sp. n.: A, male genitalia, left side; B, aedeagus, dorsal view; C, armature of diaphragm.

Castaneous-fuscous; an ovate area on genae yellowish, antennae, rostrum and legs pallid stramineous. Tegmina fuscous, a hyaline area between node and apical angle. Wings hyaline, tinged fuscous with fuscous veins.

Anal segment of male short, broadly ring-like, lateroapically distinctly tumid, lateroapical angles each produced lateroventrad in a blunt lobe minutely and irregularly denticulate on its distal margin. Pygofer with posterior opening distinctly longer than broad, anal emargination small, laterodorsal angles not at all produced, lateral margins in side view very shallowly convex, almost straight, diaphragm with dorsal margin very shallowly concave, very weakly further excavate in median

quarter of its width, armature in form of a quadrate boss projecting caudad, dorsally transverse, ventrally produced ventrad as a median ridge, heavily pigmented throughout. Aedeagus rather short, strongly laterally compressed, almost foliate, ventral margin in profile concave, dorsal margin convex, five teeth on ventral margin near base, 14 fine teeth dorsally extending from right dorsal margin at apex to left dorsal margin one-quarter from base, a minute tooth or irregularity on edge of orifice; orifice terminal. Genital styles in posterior view rather broad and short, inner and outer margins concave, apical margin sinuate, outer angle broadly produced, inner angle narrowly produced, rounded at tip.

Male (macropterous): length, 2.6 mm.; tegmen, 3.0 mm. Female (macropterous): length, 2.8 mm.; tegmen, 3.3 mm.

Holotype male and 36 ♂ and 24 ♀, St. Lucia, T.W.I., Morne Fortunée, Feb. 1940, R. G. Fennah. This species closely resembles *D. teapae* Fowl. and *D. nitens* M. & G., but can be separated easily from both. From *D. teapae* it differs in the vertex being longer than broad, and its posterior compartments being infusate, not paler than the anterior part. The side of the head above the eyes is wide enough to accommodate an ocellus in *philyra*, but definitely too narrow to do so in *D. teapae*. The post-tibial spur of *D. philyra* has 18 teeth, that of *D. teapae* 13. In the genitalia the laterodorsal areas of the anal segment are distinctly tumid in *D. philyra*, and the processes are subtriangular and moderately long; in *D. teapae* the laterodorsal areas are not at all tumid and the processes are short. The aedeagus has a different arrangement of spines, and the armature of the diaphragm is quadrate dorsally and linear ventrally in *D. philyra*, but of equal width throughout in *D. teapae*. From *D. nitens* it differs in its generally paler hue, in the shape of the processes of the anal segment, and of the armature of the diaphragm, in the spinose ornamentation of the aedeagus and in the shape of the genital styles. Caldwell & Martorell (1950, pl. 21, d7) figure an anal segment as a variant of *D. teapae*, and record that some specimens had the vertex wholly brown, and that some approached *D. nitens*. It seems probable that the present species was represented in this material. If this were so, it would suggest that this species belongs with the Greater Antillean and perhaps Central American fauna, since the writer has taken long series of *D. teapae* in Trinidad but has not found a single specimen of *D. philyra*.

Delphacodes iaxartes sp. n.

(Text-fig. 9, A-C)

Head with eyes not quite as wide as pronotum. Vertex quadrate, broader than long, anterior margin sinuate, a little produced at middle, posterior margin slightly distad of middle of eyes. Frons twice as long as broad, widest at level of lower margin of eyes, lateral margins diverging from base to level of lower margin of eyes, thence almost straight, very feebly converging distad, apical margin of frons as wide as basal margin; median carina forked at base. Antennae not reaching beyond base of clypeus, basal segment as long as broad, second about twice as long as first. Pronotum with lateral carinae concave, not attaining posterior margin. Post-tibial spur with 18 teeth.

Stramineous; carinae of frons faintly bordered with yellowish brown. Tegmina hyaline, tinged yellow, veins concolorous.

Anal segment of male very short, ring-like, a pair of short spinose processes, set well apart, arising from apical margin and lying reflexed cephaloventrad close against lower side of anal segment. Pygofer moderately long, dorsolateral angles strongly produced caudad and incurved mesad distally, lateral margins oblique, shallowly concave, a slight angular convexity on each side separating lateral margins from ventral margin, which is concave; diaphragm broad laterally, narrow medially, V-shaped, a stout vertical pigmented and sclerotized ridge developed submedially on each side and produced dorsad from near upper margin as a peg-like process,

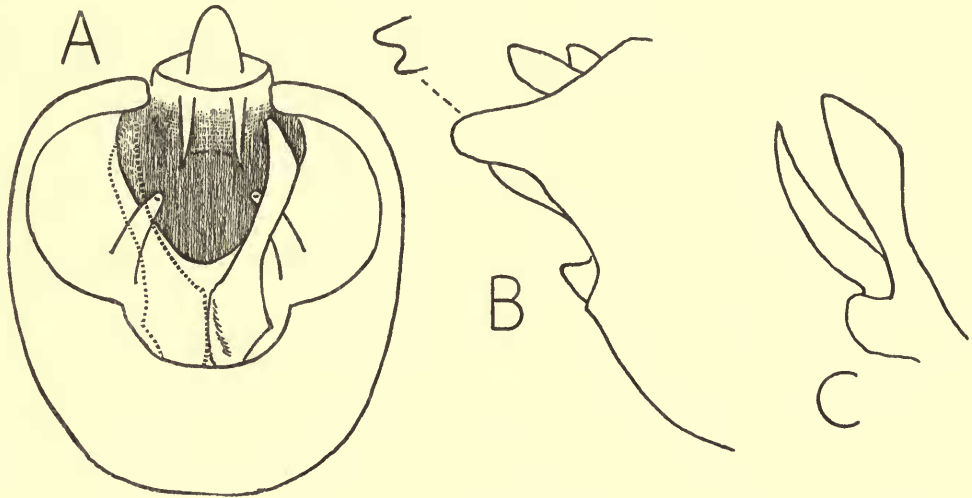


FIG. 9. *Delphacodes iaxartes* sp. n.: A, male genitalia (without aedeagus), posterior view; B, the same, right side, with incurved apex of dorsolateral angle shown separately; C, genital styles, posteroventral view from right, showing caudal projection at base of style.

each lying directly behind the corresponding genital style, median part of diaphragm not at all pigmented or sclerotized. Genital styles long, rather strongly quadrately produced caudad where they meet in middle line near base, thence rather narrow, tapering to obliquely-truncate apex in posterior view, inner margin shallowly sinuately concave, outer margin angulately convex near base, then shallowly concave to apex, outer apical angle obtuse, inner apical angle acute.

Male (brachypterous): length, 2.6 mm.

Holotype male, St. Lucia, T.W.I., Union Experiment Station, Nov. 1939, R. G. Fennah. The aedeagus of this specimen is unfortunately missing, but the other elements of the male genitalia are quite unlike those of any species known to the writer, and the ornamentation of the diaphragm appears to be unique.